

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A lens exchange type image pickup apparatus having an image processing apparatus of displaying an image of an object picked up by an image sensor and a scale indicative of a reference length in juxtaposition on an image screen of a display, in which

an image pickup lens mounted to an image pickup apparatus main body has optical magnification outputting means for outputting a predetermined optical magnification, and

the image processing apparatus includes an actual magnification calculation means for calculating an actual magnification on the screen of a display based on the optical magnification, the size for the image sensor, and the size of the image screen, and scale setting means for setting a scale based on the calculated actual magnification and the reference length of the scale to be displayed.

2. (Original) An image pickup apparatus according to claim 1, wherein the optical magnification outputting means has a memory device for storing a previously measured optical magnification.

3. (Original) An image pickup apparatus according to claim 1, wherein the image pickup lens, in a case where it is a zoom lens having a magnification adjusting movable lens, has a position sensor for detecting the position of the movable lens or the position of a movable portion corresponding thereto, and the optical magnification outputting means has a memory device for storing a position-magnification conversion data for outputting an optical magnification in

accordance with the detection position of the position sensor based on the previously measured optical magnification.

4. (Original) An image pickup lens mounted detachably to an image pickup apparatus main body having an image sensor, and including optical magnification outputting means for outputting a previously measured optical magnification.

5. (Original) An image pickup lens according to claim 4, wherein the optical magnification outputting means has a memory device for storing a previously measured optical magnification.

6. (Original) An image pickup lens according to claim 4, having a magnification adjusting movable lens for changing the optical magnification and a position sensor for detecting a position of the movable lens or a position of a movable portion corresponding thereto, in which the optical magnification outputting means has a memory device for storing a position-magnification conversion data for outputting an optical magnification in accordance with the detection position of the position sensor based on the previously measured optical magnification.

7. (Original) An image pickup apparatus having an image processing apparatus intended for displaying an image of an object picked up by an image sensor through a magnification controllable image pickup lens and a scale indicative of a reference length in juxtaposition on a display of a predetermined screen size, in which

the image pickup lens has a position sensor for detecting a position of a magnification adjusting movable lens or a position of a movable portion corresponding thereto, and a microcomputer for outputting an optical magnification and a nominal magnification corresponding to the detection position of the position sensor based on the predetermined position-magnification conversion table, and

the image processing apparatus has a scale setter for setting the scale based on an actual magnification and a reference length of the scale to be indicated.

8. (Original) An image pickup lens mounted to an image pickup apparatus main body intended to display image of an object picked up by an image sensor and a scale indicative of a reference length in juxtaposition on a display of a predetermined screen size, including

a zoom ring for operating the magnification adjusting movable lens, a click mechanism to stop at a position for the scale marking number of a nominal magnification corresponding to an actual magnification attached to a zoom indicator, a position sensor for detecting a position of a magnification adjusting movable lens or a portion of a movable position corresponding thereto, and a microcomputer for outputting an optical magnification and a nominal magnification corresponding to the detection position of the position sensor based on the previously set position-magnification conversion table, in which

a nominal magnification data corresponding to a scale marking value indicated to the zoom indicator is outputted in a case where the detection position outputted from the position sensor is within a predetermined range of error previously set around the click position stopped at the click mechanism as a center.

9. (Original) An image pickup lens according to claim 8, wherein an optical magnification data corresponding to a position data set as a click position is outputted in a case where a detection position outputted from the position sensor is within a predetermined range of error previously set around the click position stopped by the click mechanism as a center.

10. Canceled